

REMARKS

Claims 1-36 are in the case.

The applicants have studied the Office Action dated February 3, 2006 and believe the application is in condition for allowance. Reconsideration and reexamination are respectfully requested.

Claims 1-36 have been rejected under 35 USC 103(a) as being unpatentable over Moreshead (EP 0845799) in view of Tanaka (US 5420415). This rejection is respectfully traversed.

Claim 1, for example, is directed to an "ion implanter electrode component ... comprising: an electrically conductive insert member ... comprising ... a plurality of alignment pins positioned to engage said ion implanter support frame and to align said aperture in an aligned position relative to said ion implanter support frame ...".

The Examiner has cited no portion of the Moreshead reference as teaching or suggesting "a plurality of alignment pins positioned to engage said ion implanter support frame and to align said aperture in an aligned position relative to said ion implanter support frame." Instead, it is the Examiner's position that the Tanaka reference teaches the use of alignment pins for engaging an aperture on a support while ensuring alignment" citing col. 4, lines 45-52 and FIG. 3 of the Tanaka reference. The applicants respectfully disagree.

The Examiner citation to the Tanaka reference describes a holder plate 22. It is believed that the Examiner's reference to "alignment pins" likely refers to the projections 22a of the holder plate. However, it is respectfully submitted that the Examiner's citation to the Tanaka reference has no mention of any alignment function of the projections 22a. Instead, the Tanaka reference states that the purpose of the projections 22a is to "serve as rotation stoppers." Still further, the Examiner has cited no teaching or suggestion that the projections 22a of the holder plate 22 may be used to align an electrode insert member relative to an ion implanter support frame.

It is the Examiner's position that it would have been obvious to "use a plurality of alignment pins to align the aperture of the [Moreshead] insert member relative to the support frame, since the use of alignment pins for engaging an aperture on a support and sliding engaging in aperture on a support were art recognized equivalents for engaging an aperture to a support as taught in Tanaka." The applicants

respectfully disagree.

The Examiner has failed to provide any explanation of how the sliding aperture insert 80 and/or the seat 76 of the Moreshead reference may be modified to utilize the projections 22a of the holder plate 22 of the Tanaka reference. Still further, the Examiner has failed to cite any motivation for modifying the device of the Moreshead reference in light of the Examiner's citations to the Tanaka reference.

As set forth above, the Examiner has cited no teaching or suggestion that the projections 22a of the holder plate 22 of the Tanaka reference may be used to align an electrode insert member relative to an ion implanter support frame. The Examiner has failed to cite any motivation for one of ordinary skill to utilize the projections 22a of the Tanaka reference with the device of the Moreshead reference.

It is the Examiner's position that "the use of alignment pins for engaging an aperture on a support and sliding engaging in aperture on a support were art recognized equivalents for engaging an aperture to a support as taught in Tanaka." The Examiner has failed to provide any support for the statement that alignment pins and sliding engagement are "art recognized equivalents." However, even if true, the Examiner has failed to provide any teaching, suggestion or motivation to substitute one "equivalent" for another in the device of the Moreshead reference. On the contrary, it is respectfully submitted that the Examiner is impermissibly using the benefit of hindsight, by using the applicants' disclosure as a blueprint to piece together selected portions of the Moreshead and Tanaka references in a manner clearly not taught or suggested by either reference, considered alone or in combination.

It is therefore respectfully submitted that the rejection of independent claim 1 should be withdrawn. Independent claims 6, 12, and 18 may be distinguished in a similar fashion. Independent claims 19, 24, 30 and 36 which recite an insert member adapted to be engaged by alignment pins on the support frame, may also be distinguished in a similar fashion.

The rejection of the dependent claims is improper for the reasons given above. Moreover, the dependent claims include additional limitations, which in combination with the base and intervening claims from which they depend provide still further grounds of patentability over the cited art.

Claims 1-36 have been rejected under 35 USC 103(a) as being unpatentable over Trueira. This rejection is respectfully traversed.

Claim 24, for example, is directed to an "ion implanter electrode for use in an ion implanter adapted to generate an ion beam, comprising: an electrically conductive electrode support frame which

defines an aperture; and an electrically conductive insert member adapted to be inserted into said ion implanter support frame, said insert member comprising an electrode body portion defining an aperture and adapted to be inserted into said support frame aperture, said insert member further comprising first and second alignment surfaces of which said first alignment surface is groove-shaped; wherein said support frame further comprises a first alignment pin positioned to engage said ion implanter insert member groove-shaped first alignment surface and a second alignment pin positioned to engage said ion implanter insert member second alignment surface to align said insert member aperture in an aligned position relative to said ion implanter support frame wherein said electrode body portion is positioned to receive said ion beam passing through said aperture, said insert member further comprising a plurality of retention flanges adapted to engage said ion implanter support frame and to retain said electrode body portion in said aligned position within said ion implanter support frame and electrically coupled to said support frame.”

It is the Examiner’s position that the Trueira reference describes an ion implanter support frame 90 and/or support frame 80. However, the frame 90 is not part of an electrode for an ion implanter as required by claim 24. Instead, the Trueira reference describes the structure 90 as an “alignment fixture removably mounted on the source housing 44 ...” Trueira reference, col. 6, lines 37 *et seq.* The Trueira reference makes clear that the alignment fixture 90 is “removed from the ion beam source housing 44” (col. 9, lines 24 *et seq.*) and therefore is not a part of the ion implanter electrode.

The Examiner has cited pins 122 of the Trueira reference. However, the Trueira reference indicates that the pins 122 are part of the alignment fixture 90 (see FIG. 7a). Hence, it is clear that the pins 122 are not part of an ion implanter electrode. Similarly, the slots 105 cited by the Examiner are part of the alignment fixture 90 (see FIG. 7b). Hence, it is clear that the slots 105 are not part of an ion implanter electrode.

The support tube 80 cited by the Examiner does appear to be a part of the ion implanter of the Trueira reference. However, the pins 122 and slots 105 cited by the Examiner are part of the removable alignment fixture 90 and not the ion implanter as set forth above.

It is the Examiner’s position that it would have been obvious to “omit the self centering clamping assembly, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. As a result

of omitting the self-centering clamping assembly, the alignment fixture (90) would then remain mounted to the housing during operation of the ion beam.” The applicants respectfully disagree.

The Examiner has failed to cite any teaching, suggestion or motivation for omitting the clamping assembly from the device of the Trueira reference. The Examiner has failed to cite any teaching, suggestion or motivation for leaving the alignment fixture 90 in the Trueira device after the alignment function has been completed. Further, the Examiner has failed to explain why one of ordinary skill would ignore the explicit teachings of the Trueira reference which teach an installer to temporarily install the alignment fixture 90 to the housing 44 with the clamping assembly 92 and the extraction member 72 attached to the fixture 90, clamp the extraction member 72 to the support tube 80 using the clamping assembly 92 with the extraction member 72 aligned by the alignment fixture 90, and then remove the alignment fixture 90.

Moreover, it is respectfully submitted that the Examiner’s suggested modification of the Trueira device may impair the operation of the Trueira device. For example, it appears from FIG.8a that the mounting surface 96 of the alignment fixture 90 if left in the device during operation, would block the aperture 78 of the extraction member 72. Still further, it appears that the clamping assembly 92 is needed to seal the extraction member 72 to the support tube 80 (col. 8, lines 58-62). It is clear that the Examiner is impermissibly using the benefit of hindsight, by using the applicants’ disclosure as a blueprint to modify the device of the Trueira reference in a manner clearly not taught or suggested by the Trueira reference

Accordingly, it is clear that claim 24 is not in any manner anticipated or made obvious by the Examiner’s citations to the Trueira reference. Independent claims 19, 24, 30 and 36 may be distinguished in a similar fashion. Independent claims 1, 6, 12 and 18 which recite an insert member having alignment pins adapted to be engaged by the support frame, may also be distinguished in a similar fashion.

The rejection of the dependent claims is improper for the reasons given above. Moreover, the dependent claims include additional limitations, which in combination with the base and intervening claims from which they depend provide still further grounds of patentability over the cited art.

The Examiner has made various comments concerning the anticipation or obviousness of certain features of the present inventions. Applicants respectfully disagree. Applicants have addressed those and other comments directly hereinabove or the Examiner’s comments are deemed moot in view of the above response.

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In view of all of the above, it is respectfully submitted that the present application is now in condition for allowance. Reconsideration and reexamination are respectfully requested and allowance at an early date is earnestly solicited.

Respectfully submitted,



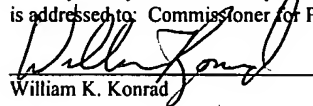
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May 3, 2006
(Date)